Amendments to the Claims:

The following listing of claims replaces all previous versions and listings of the claims in this application:

Listing of the Claims:

Claims 1-44: (canceled)

45. (currently amended): A vortex-induced vibration (VIV) reduction mechanism ~~to be applied to an exterior surface of~~ for a substantially cylindrical structure having an exterior surface, for reduction of the effects of vortex-induced vibration (VIV) in the structure when the structure is submerged in flowing fluid, the mechanism comprising:

a plurality of columnar segments disposed around the exterior surface of the structure in a vertically stacked arrangement, each of the segments having a vertical vortex-shedding surface discontinuity oriented substantially parallel to the axis of the structure, the segments being arranged with respect to each other so that the surface discontinuity of each segment is circumferentially displaced from the surface discontinuity of an adjacent segment, whereby the surface discontinuities of the plurality of segments define a discontinuous, stepwise, approximately helical pattern of vortex-shedding discontinuities along the length of the structure.

46. (previously presented): The mechanism of claim 45, wherein the surface discontinuity is a notch.

47 (previously presented): The mechanism of claim 45, wherein the surface discontinuity is a projection.

Claim 48 (canceled)

Claim 49 (currently amended): A vortex-induced vibration (VIV) reduction mechanism ~~to be applied to an exterior surface of~~ for a substantially cylindrical structure having an exterior surface, for reduction of the effects of vortex-induced vibration (VIV) in the structure when the structure is submerged in flowing fluid, the mechanism comprising:

a plurality of columnar segments disposed around the exterior surface of the structure in a vertically stacked arrangement, each of the segments having [[a]] an identical non-circular cross-sectional shape, each of the segments being angularly offset from an adjacent segment by about 45 degrees, whereby the plurality of segments forms a VIV-reducing structure having a twisted, spiral shape.

Claim 50 (currently amended): A vortex-induced vibration (VIV) reduction mechanism ~~to be applied to an exterior surface of~~ for a substantially cylindrical structure having an exterior surface, for reduction of the effects of vortex-induced vibration (VIV) in the structure when the structure is submerged in flowing fluid, the mechanism comprising:

a plurality of columnar segments disposed around the exterior surface of the structure in a vertically stacked arrangement, each of the segments having [[a]] an identical non-circular cross-sectional shape, each of the segments being angularly offset from an adjacent segment, whereby the plurality of segments ~~forms~~ defines a discontinuous, ~~stepped exterior shape~~ VIV-reducing exterior surface comprising a series of vortex-shedding discontinuities arranged in a stepped pattern along the length of the structure.

51. (new): The mechanism of claim 49, wherein the cross-sectional shape is elliptical.

52. (new): The mechanism of claim 49, wherein the cross-sectional shape is a triangle with rounded corners.

53. (new): The mechanism of claim 49, wherein the cross-sectional shape is square with rounded corners.

54. (new): The mechanism of claim 50, wherein the cross-sectional shape is elliptical.

55. (new): The mechanism of claim 50, wherein the cross-sectional shape is a triangle with rounded corners.

56. (new): The mechanism of claim 50, wherein the cross-sectional shape is square with rounded corners.

57. (new): The mechanism of claim 45, wherein each of the columnar segments has at least two vortex-shedding surface discontinuities equidistantly spaced around the exterior surface of the columnar segment.

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58. (new) The mechanism of claim 57, wherein each columnar segment has a radius that varies in length between each two successive vortex-shedding surface discontinuities.